



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,584	02/28/2008	Kenichi Nagayama	46969-5447	7384
55694 7590 08/12/2009 DRINKER BIDDLE & REATH (DC) 1500 K STREET, N.W. SUITE 1100 WASHINGTON, DC 20005-1209				
EXAMINER				
TRAN, TAN N				
ART UNIT		PAPER NUMBER		
2826				
MAIL DATE		DELIVERY MODE		
08/12/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,584

Applicant(s)

NAGAYAMA, KENICHI

Examiner

TAN N. TRAN

Art Unit

2826

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 04/30/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 5, 7 - 23 is/are pending in the application.
- 4a) Of the above claim(s) 3, 10 - 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7 - 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d), after reconsideration of the responses filed on 04/30/09 and 07/31/09. The certified copy has been filed in PCT/JP05/00934, filed on 01/19/2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 5, 7, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamamura et al. (2003/0199111).

With regard to **claim 1**, Hamamura et al. disclose a semiconductor apparatus (fig. 10) comprising a substrate (referred herein below as a lower portion “6A” by examiner’s annotation), a semiconductor device (regions 7 and upper portion of layer 6 are constituted as semiconductor device) formed on the semiconductor substrate (6A), and a protective film (referred herein below as a lower portion “4A” by examiner’s annotation) for sealing the semiconductor device (as indicated above), the semiconductor apparatus further comprising:

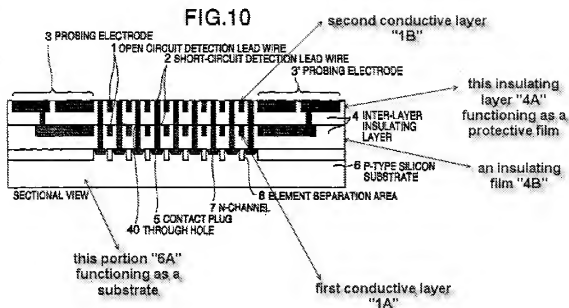
- a first conductive layer (referred herein below as a lower portion “1A” by examiner’s annotation) in contact with a back surface of the protective film (4A); and

- a second conductive layer (referred herein below as a lower portion “1B” by examiner’s annotation) in contact with a front surface of the protective film (4A);

- a first electrode terminal (3) electrically connected with the first conductive layer (1A);
and

- a second electrode terminal (3’) electrically connected with the second conductive layer (1B),

wherein each of the first terminal (3) and the second electrode terminal (3’) has a surface area such that a metal probe (see, for example fig. 20B) can make contact therewith. (Note see fig. 10 below of Hamamura et al.).



With regard to **claim 2**, Hamamura et al. disclose an insulating film (referred herein below as a lower portion "4B" by examiner's annotation) of electrical insulation formed on the semiconductor device (as indicated above), the first conductive layer (1A) being formed on the insulating film (4B).

With regard to **claim 4**, Hamamura et al. disclose at least one of the first and second conductive layers (1A, 1B) is patterned into stripes.

With regard to **claim 5**, Hamamura et al. disclose the first conductive layer (1B) and the second conductive layer (1A) are patterned into stripes so as to cross each other (the second conductive layer "1B" directly formed on the first conductive layer "1A" in the cross sectional view. Therefore, the first conductive layer (1B) and the second conductive layer (1A) are patterned into stripes so as to cross each other).

With regard to **claim 7**, Hamamura et al. disclose the first and second electrode terminals (3, 3' are formed on a peripheral part of the substrate (6A), the peripheral part being located outside an area in which the semiconductor device (as indicated above) is formed.

With regard to **claim 8**, Hamamura et al. disclose at least one of the first electrode terminal (3) and the second electrode terminal (3') is made of a plurality of electrode pieces (as shown in the cross sectional view in fig. 10) arranged at predetermined intervals along a peripheral part of the semiconductor substrate (6A).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamamura et al. (2003/0199111) in view of Bernsen et al. (2001/0041269). The teachings of Hamamura et al. (2003/0199111) have been discussed above.

With regard to **claim 9**, Hamamura et al. are silent that the semiconductor device includes an electroluminescent device.

However, Bernsen et al. disclose the semiconductor device (1) includes an electroluminescent device (paragraph [0066], line 1, and see fig. of Bernsen).

Therefore, it would have been obvious to one of ordinary skill in the art to substitute the Hamamura et al.'s device by an electroluminescent device such as taught by Bernsen et al. (7,163,837) in order to achieve a high brightness of the device.

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in *Graham*. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. See MPEP § 2143. Referring to MPEP § 2143, one exemplary rationale that may support a conclusion of obviousness includes:

(B) Simple substitution of one known element for another to obtain predictable results.

To reject a claim based on this rationale, Office personnel must resolve the *Graham* factual inquiries. Then, Office personnel must articulate the following:

(1) a finding that the prior art contained a device (method, product, etc.) which differed from the claimed device by the substitution of some components (step, element, etc.) with other components;

(2) a finding that the substituted components and their functions were known in the art;

(3) a finding that one of ordinary skill in the art could have substituted one known element for another, and the results of the substitution would have been predictable; and

(4) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

The rationale to support a conclusion that the claim would have been obvious is that the substitution of one known element for another yields predictable results to one of ordinary skill in the art. If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art.

IN THIS CASE:

(1) the prior art contained a device (SEEN IN Hamamura et al. (2003/0199111)) which differed from the claimed device in that the claimed device substitutes an element, (the semiconductor device includes an electroluminescent device) for Hamamura et al. (2003/0199111), in order to achieve a high brightness of the device.

(2) The substituted component and its functions are known in the art. Paragraph [0066], line 1, and see fig. of Bernsen disclose the semiconductor device (1) includes an electroluminescent device.

(3) It is also clear from Bernsen that one of ordinary skill in the art could have substituted the one known element (the semiconductor device includes an electroluminescent device) for Hamamura et al., and the results of the substitution would have been predictable.

(4) MPEP 2143 points out that Office personnel must evaluate objective evidence relevant to the issue of obviousness. Such evidence, sometimes referred to as “secondary considerations,” may include evidence of commercial success, long-felt but unsolved needs, failure of others, and unexpected results. The evidence may be included in the specification as filed, accompany the application on filing, or be provided in a timely manner at some other point during the prosecution. The weight to be given any objective evidence is decided on a case-by-case basis.

The mere fact that an applicant has presented evidence does not mean that the evidence is dispositive of the issue of obviousness.

Applicants' specification, however, does not include any evidence of secondary considerations. Applicants disclose that the claimed combination "may be" made; Applicants do not disclose any unexpected results or indeed any results at all.

Response to Amendment

6. Applicant's arguments with respect to claims 1, 2, 4, 5, 7 - 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN N. TRAN whose telephone number is (571) 272-1923. The examiner can normally be reached on 8:30-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PURVIS SUE can be reached on (571) 272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN N TRAN/

Examiner, Art Unit 2826

